

several minutes (as long as 13 minutes) followed by silent periods of variable length (few minutes to several hours). The song rate counted during three 1-minute periods was 16, 17, and 19 songs per minute. The rail appeared to be little affected by the presence of observers on the boardwalk. On several occasions it walked under the boardwalk during singing bouts. The presumed male was probably unmated because there was no evidence of additional birds. It apparently departed the area in mid-July, as repeated attempts to relocate the bird in late July and August were unsuccessful.

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#### LITERATURE CITED

- Eddleman, W. R., R. E. Flores, & M. L. Legare. 1994. Black Rail (*Laterallus jamaicensis*). No. 123 in A. Poole & F. Gill (eds.), *The Birds of North America*. Academy of Natural Sciences, Philadelphia, and American Ornithologists' Union, Washington, DC.
- Iliff, M. J. 2002. Middle Atlantic Coast. *North American Birds* 56: 423-426.
- Robbins, C. S., & E. A. T. Blom. 1997. *Atlas of the Breeding Birds of Maryland and the District of Columbia*. University of Pittsburgh Press, Pittsburgh, PA. 504 pp.
- Rottenborn, S. C., & E. S. Brinkley. 2007. *Virginia's Birdlife: An Annotated Checklist*. (Virginia Avifauna No. 7). Virginia Society of Ornithology. 330 pp.
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© 2013 Virginia Natural History Society
- HUMMINGBIRDS VISIT FEEDERS AT HIGH-RISE APARTMENT BUILDINGS.** — Many species of birds have shown a remarkable ability to adapt to anthropogenic habitats (Graves, 2004) and adjust their foraging behavior to take advantage of novel food sources (Fisher & Hinde, 1949; Martin & Fitzgerald, 2005). No taxonomic group demonstrates this better than hummingbirds (Trochiliformes), which rapidly learn to visit sugar-water feeders. However, the extent to which hummingbirds exploit artificial food resources in high-density urban environments is largely undocumented. A review of peer-reviewed literature revealed no reports of hummingbirds visiting feeders at high-rise apartment buildings.
- Here I report Ruby-throated Hummingbirds (*Archilochus colubris*) visiting sugar-water feeders at a high-rise apartment building in College Park, Prince George County, Maryland. It was brought to my attention that hummingbirds had visited feeders and potted plants on the upper balconies from May through September, 2011. The apartment resident contacted me again in June 2012 to report that hummingbirds were visiting the same balcony feeders. I visited the apartment complex on 26 July 2012 and observed two hummingbirds visiting feeders on balconies on the 14<sup>th</sup> and 15<sup>th</sup> floors (Fig. 1). The highest feeder was 43 m above ground level (measured with a Bushnell laser range finder). Both individuals were observed trap-lining among feeders, potted plants, and hanging baskets scattered among the balconies of the upper floors of the apartment complex. A few direct flights from the balconies to the adjacent forest and vice versa were observed but hummingbirds mostly perched on balcony trellises between foraging bouts. In one case, a departing individual was observed flying over the building (~50 m above ground level). A walk around the two high-rise buildings, both of which were comprised of 16 floors, revealed hummingbird feeders on six different balconies (two each on the 15<sup>th</sup> and 14<sup>th</sup> floors and one each on the 13<sup>th</sup> and 12<sup>th</sup> floors). Feeders were of similar design with red "nectar" receptacles. The nearest natural habitat, a relatively large tract of deciduous forest (>200 ha), was ~60-70 m from the apartment buildings.
- These observations raise an interesting question: How do hummingbirds discover high-rise feeders? Red plastic feeders probably act as visual beacons. The spectral sensitivity of hummingbird photoreceptors ranges from the near ultraviolet (~350 nm) through red wavelengths (~700 nm) of the visual spectrum (Goldsmith & Goldsmith, 1979; Goldsmith, 1980; Herrera, et al., 2008). However, most ornithophilous plants in North America have red or orange flowers (Grant, 1966; Grant & Grant, 1968). Two climbing lianas in the middle Atlantic states, trumpet vine (*Campsis radicans*) and cross vine (*Bignonia capreolata*), have large reddish-orange flowers, or red and yellow flowers (5-7 cm) that are primarily pollinated by the Ruby-throated Hummingbird



Fig. 1. Arrows mark the location of hummingbird feeders on the balconies of a high-rise apartment building in College Park, Maryland. The highest feeder was 43 m above ground level.

(James, 1948; Bertin, 1982). The ornithophilous biology of the trumpet vine was noted as early as the 18<sup>th</sup> century (Catesby, 1731: 65 and facing plate) and John James Audubon painted a veritable swarm of hummingbirds at a cluster of trumpet vine blossoms (Audubon, 1835a, b). Both lianas regularly ascend trees to a height of 15 m (Graves, pers. obs.). Hummingbirds are undoubtedly accustomed to encountering nectar sources well above ground level. In any case, the vertical distance between the highest naturally-occurring flowers and high-rise apartment feeders is inconsequential for a species with such extraordinary powers of flight.

Is there a limit to how high Ruby-throated Hummingbirds will fly to reach high-rise apartment feeders? The answer probably depends on the density of feeders, hanging baskets, and potted plants on lower floors and the distance of the building from natural habitat. However, under ideal conditions, I would not be surprised to learn that Ruby-throated Hummingbirds visit high-rise apartment feeders 50-75 m above ground. This constitutes yet another example of innovative foraging behavior in a group of birds already renowned for behavioral flexibility.

I thank Leslie Reinhardt for alerting me to the presence of hummingbird feeders at high-rise apartments and Leslie Overstreet (Joseph F. Cullman 3rd Library of Natural History, Smithsonian Institution Libraries) for bibliographic advice.

#### LITERATURE CITED

- Audubon, J. J. 1835a. *Ornithological Biography*, Vol. 3. Adam and Charles Black, Edinburgh.
- Audubon, J. J. 1835b. Ruby-throated Hummingbird, plate CCLIII, *The Birds of America*, Vol. 3. Havell, London.
- Bertin, R. I. 1982. Floral biology, hummingbird pollination and fruit production of trumpet creeper (*Campsis radicans*, Bignoniaceae). *American Journal of Botany* 69: 122-134.
- Catesby, M. 1731. *The Natural History of Carolina, Florida and the Bahama Islands*. Volume 1. Published by the author, London.
- Fisher, J., & R. A. Hinde. 1949. The opening of milk bottles by birds. *British Birds* 42: 347-357.
- Goldsmith, T. H. 1980. Hummingbirds see ultraviolet light. *Science* 207: 786-788.
- Goldsmith, T. H., & K. M. Goldsmith. 1979. Discrimination of colors by the black-chinned hummingbird, *Archilochus alexandri*. *Journal of Comparative Physiology A*. 130: 209-220.
- Grant, K. A. 1966. A hypothesis concerning the prevalence of red coloration in California hummingbird flowers. *American Naturalist* 100: 85-97.
- Grant, K. A., & V. Grant. 1968. *Hummingbirds and Their Flowers*. Columbia University Press, New York, NY. 114 pp.

Graves, G. R. 2004. Avian commensals in Colonial America: when did *Chaetura pelagica* become the chimney swift? *Archives of Natural History* 31: 300-307.

Herrera, G., J. C. Zagal, M. Diaz, M. J. Fernandez, A. Vielma, M. Cure, J. Martinez, F. Bozinovic, & A. G. Palacios. 2008. Spectral sensitivities of photoreceptors and their role in colour discrimination in the green-backed firecrown hummingbird (*Sephanoides sephaniodes*). *Journal of Comparative Physiology A* 194: 785-794.

James, R. L. 1948. Some hummingbird flowers east of the Mississippi. *Castanea* 13: 97-109.

Martin, L. B., & L. Fitzgerald. 2005. A taste for novelty in invading house sparrows, *Passer domesticus*. *Behavioral Ecology* 16: 702-707.

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**VACUSUS VICINUS (LAFERTÉ-SÉNECTÈRE) (COLEOPTERA: ANTHICIDAE): NORTHERN RANGE EXTENSIONS TO VIRGINIA, MARYLAND, MISSOURI, AND KANSAS.** — Published records typically cite the general range for *Vacusus vicinus* (LaFerté-Sénectère) (Coleoptera: Anthicidae) as the southern United States to Venezuela and the Caribbean, including Cuba, Hispaniola, Jamaica, Lesser Antilles, Puerto Rico, and the Virgin Islands (Werner, 1983). It has also been reported from Hawaii (Werner, 1966). Thus, a northern range extension was suspected when individuals of this ant-like flower beetle were recently collected from two sites in a National Park, George Washington Memorial Parkway (GWMP), in northern Virginia (Fairfax County). Searches of twelve entomological collections (AMNH, ANSP, CUAC, DMNH, GWMP, MCZ, NMNH, VMNH, UCRC, UDCC, UMRM, and UNHC) confirmed reports of *V. vicinus* from Mexico and Central America and North American specimens were

located from Alabama, Arizona, Arkansas, southern California (Imperial, Los Angeles, and Riverside counties), Florida, Georgia, Kansas, Louisiana, Maryland, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, Texas, and Virginia. The northern limit of this species is defined based on the following specimens: **MARYLAND, Talbot Co.:** Wittman, at Harris Creek, 38°47'42"N, 76°16'35" W, 18 August 1974, W. E. Steiner (NMNH). **VIRGINIA, Fairfax Co.:** Dyke Marsh, 38°46' 28.21" N, 77°3'0.32" W, sandy tidal beach, 15 May 2012, B. Steury (GWMP); Collingwood Picnic Area, turf grass at edge of parking lot, 9 June 2012, B. Steury (GWMP). **MISSOURI, Boone Co.:** Columbia, 38°92' N, 92°34' W, 5 March 1946, W. S. Craig (UMRM). **KANSAS, Crawford Co.:** Pittsburg, 37°24' N, 94°42' W, 27 June 1954, E. L. Todd (NMNH). The records from Maryland, Missouri, and Kansas are of single specimens and it is unknown if they represent ephemeral introductions or are part of native populations.

Other Virginia specimens of *V. vicinus* at NMNH and VMNH are from Halifax, Northampton, Nottoway, Mecklenberg, and Isle of Wight counties, and the City of Virginia Beach. The recent collections from Fairfax County extend the northern range limit within the Commonwealth by 250 km from a site in Nottoway County.

Label data indicate that specimens have been collected at artificial lights, sometimes in large numbers; series have also been found under leaf litter on sand or sandy soil and in beach drift debris at or above the high tide line.

Werner (1961) stated that *V. vicinus* is variable in color with specimens from the southern part of the range having luteous to rufous elytra with a dark apex and interrupted submedian band, while specimens from the northern portion of the range possess largely piceous elytra. Both color variations are represented in the collection from Fairfax County: the Dyke Marsh specimen possesses rufous elytra with a dark apex and interrupted submedian band and the Collingwood Picnic Area specimen has piceous elytra tinted rufous at the base. The only other Anthicidae in the collections from the George Washington Memorial Parkway, all from Fairfax County, Virginia, are: *Acanthinus myrmecops* (Casey), *Anthicus cervinus* (LaFerté-Sénectère), *Macratia murina* (Fabricius), *Malporus cinctus* (Say), *Notoxus murinipennis* (LeConte), *Sapintus fulvipes* (LaFerté-Sénectère), *Sapintus pubescens* (LaFerté-Sénectère), *Stricticollis tobias* (Marseul), and one *Tomoderus* sp. female.